### PATENT COOPERATION TREATY





From the INTERNATIONAL SEARCHING AUTHORITY

To: MAEDA, Hiroshi

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## **PCT**

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing (day/month/year)

26. 4. 2005

Applicant's or agent's file reference 504-0-435CT1

FOR FURTHER ACTION
See para

See paragraph 2 below

International application No. PCT/JP2005/000712

International filing date (day/month/year)

13.01.2005

Priority date (day/month/year) 16.01.2004

International Patent Classification (IPC) or both national classification and IPC  $Int.Cl.^7\,H01L21/68$ , G02F1/1333

**Applicant** 

SHARP KABUSHIKI KAISHA

| l. | This opinion co | ntains indications | relating to the | e following items: |
|----|-----------------|--------------------|-----------------|--------------------|
|----|-----------------|--------------------|-----------------|--------------------|

Box No. I Basis of the opinion

Box No. II Priority

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Box No. IV Lack of unity of invention

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;

citations and explanations supporting such statement

Box No. VI Certain documents cited

Box No. VII Certain defects in the international application

Box No. VIII Certain observations on the international application

#### 2. FURTHER ACTION

)

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

| Date of completion of this opinion 12.04.2            | 005  |
|---|--|
| Name and mailing address of the ISA/JP                | Authorized officer 3C 9147                 |
| Japan Patent Office                                   | Akihiro Nakajima                           |
| 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japa | an Telephone No. +81-3-3581-1101 Ext. 3324 |

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000712

| Box  | No. I      | Basis of the opinion   |
|------|------------|--|
| 1.   | which it v | ard to the language, this opinion has been established on the basis of the international application in the language in was filed, unless otherwise indicated under this item.   |
|      | Thi        | is opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under   |
|      | Ru         | les 12.3 and 23.1(b)).   |
| 2.   |            | ard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the nvention, this opinion has been established on the basis of:  |
| 1. V | a. type of | material _   |
|      |            | a sequence listing   |
|      | Γ          | table(s) related to the sequence listing   |
|      |            | of material  |
|      | F          | in written format  |
|      | Γ          | in computer readable form  |
|      |            | filing/furnishing  |
|      |            | contained in the international application as filed.   |
|      |            | filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.   |
|      | 1.         | full history subsequently to this Additional for the purposes of section.  |
| ·3.  | file       | addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been ed or furnished, the required statements that the information in the subsequent or additional copies is identical to that the application as filed or does not go beyond the application as filed, as appropriate, were furnished. |
| 4.   | Additiona  | al comments:   |
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# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000712

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

| . Statement                   |        | : |        |         |
|-------------------------------|--------|---|--------|---------|
| Novelty (N)                   | Claims |   | 2 - 8  | <br>YES |
|                               | Claims |   | 1      | NO      |
| Inventive step (IS)           | Claims |   | 2 - 4  | <br>YES |
|                               | Claims |   | 1, 5-8 | NO      |
| Industrial applicability (IA) | Claims |   | 1 – 8  | YES     |
|                               | Claims | - |        | <br>NO  |

#### 2. Citations and explanations

D1:EP 0867773 A2 (NIKON CORPORATION) 1998. 09. 30&JP 10-270535 A

& US 2003/0164934 A1

D2: JP 2001-118913 A (DAI NIPPON PRINTING CO.,LTD.) 2001.04.27

D 3 : J P  $6-2\ 4\ 2\ 4\ 3\ 1$  A (HITACHI ELECTRONICS ENGINEERING CO.,LTD.) 1994. 09. 02

### [Claim1]

The subject matter of claim 1 does not appear to be novel with respect to D1. Claim 1 relates to [wherein a plurality of leak trenches open to both the adsorption face of the stage and a side face of the stage are formed in a region of the stage except a region where the adsorption ports are formed]. Such [wherein a plurality of leak trenches open to both the adsorption face of the stage and a side face of the stage are formed in a region of the stage except a region where the adsorption ports are formed] appears to be known from D1 (see [ paragraph 28, Line 5 to 56, fig. 6]).

### [Claim 5, 6]

The subject matter of claim 5 , 6 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 2 cited in the same.

Technical features [The fine projection parts 90] and [the convex pars 1c(especially[0012] and fig.2)], disclosed in D1 and D2 respectively, have the same function and are related to similar technical fields. Therefore, the skilled person in the art would easily conceive the idea of employing the feature [the convex pars 1c] in D2 to substitute the feature [The fine projection parts 90] disclosed in D1.

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

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#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: V

### [Claim7]

The subject matter of claim7 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 2 cited in the same.

In view of the description of D2, the skilled person would therefore regard it as a design procedure to include that the feature [a stripped pattern] instead of the [a grid pattern] in D2 in order to solve the problem posed.

#### [Claim8]

The subject matter of claim8 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 3 cited in the same.

The technical feature [holder 10] in D1 and the feature [holding parts 10,11] in D3 are concerned with mutually related technical fields. Therefore, the skilled person in the art would easily conceive the idea of employing the feature in D1 to substitute the feature disclosed in D3.

#### [Claim2-4]

The subject matter of claim 2-4 is neither disclosed in any of the documents cited in the ISR nor obvious to a person skilled in the art.